



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,829	08/25/2003	Arvind D. Patel	11836.0725.NPUS00	2942
26721	7590	08/09/2005	EXAMINER	
CARTER J. WHITE LEGAL DEPARTMENT M-I L.L.C. 5950 NORTH COURSE DRIVE HOUSTON, TX 77072			RICHARD, CHARLES R	
			ART UNIT	PAPER NUMBER
			1712	

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/647,829

Applicant(s)

PATEL ET AL.

Examiner

C. R. Richard

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 9-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 13-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 9-12 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-8 and 13-18, drawn to a wellbore fluid (and related methods of making and using same), classified in class 507, subclass 203.
- II. Claims 9-12, drawn to a method of making the continuous phase of a drilling fluid, classified in class 507, subclass 103.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as product and process of making same. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the process as claimed may, for example, be used to make a two as opposed to a three component blend – the blends of the group I claims are recited as three component.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Applicant's attorney, Carter White, on July 27, 2005, a provisional election was made without traverse to prosecute the invention of group I (claims 1-8 and 13-18). Affirmation of this election must be made by Applicant

in replying to this Office action. Claims 9-12 are withdrawn from further consideration by the Examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Information Disclosure Statement

2. No IDS has been filed in this case to date. Of course, one is not necessarily required.

Oath/Declaration

3. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02. The oath or declaration is defective because, it was not executed in accordance with either 37 CFR 1.66 or 1.68. Inventor Rabke did not date his signature.

Specification

4. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification contains terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear terms used in the specification are: "first synthetic internal olefin", "internal olefin having from 16 to 18 carbons", "C16-C18 internal olefin", "C16-18 IO" and others corresponding to the "second" and "third" internal olefins. It is not entirely clear how these terms are interrelated given the way the specification presents them; for example, are the first four

Art Unit: 1712

terms given above supposed to be exact synonyms? This issue is of importance as it goes to the heart of determining the scope of the invention.

There is confusion here given what Applicant says or fails to say in various parts of the specification concerning these terms. Perhaps most telling is the fact that Applicant has written claim 17 as dependent on, and hence having a scope that should not be coincidental with, claim 15. In any case, the first, second and third olefin terms overlap each other in such a way that the public and even those skilled in the art would not be able to tell what scope Applicant is describing; it is of note here that the scope described in the specification (and especially in the claims) is not limited as to amounts of each of the respective three "olefins". Appropriate correction is required.

Applicant will have to provide further explanation than what is currently presented in order to comply to correct the specification. Applicant is reminded of the prohibition against adding new matter to the specification (35 USC 132), but Applicant may be able to "regroup" or "supplement" some of the teachings of the present specification (perhaps using data from the examples) to make appropriate corrections.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-8 and 13-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter

Art Unit: 1712

which applicant regards as the invention. As discussed above under objections to the specification, the definitions of the “olefins” are not clear, especially considering the presentation of claim 17 as dependent on claims 15, and there is the overlap issue. The rejected claims are thus rendered indefinite.

In addition, claim 14 recites “further comprising blending an alpha olefin ...”, but not say with what it is blended. Given that the claim is written as comprising the stated steps, this renders the claim indefinite.

Note that for purposes of examination of the claims on the merits, the Examiner will assume the broadest possible interpretation for the claim limitations; this would allow, for example, a reference showing a biodegradable well bore fluid containing a C16 internal olefin to anticipate at least claim 1.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-8 and 13-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Gee et al. in US Patent 5,589,442. Gee teaches drilling fluids comprising synthetic C14 to C18 internal olefins.

Example 7 of Gee shows a drilling fluid made up of C14, C16 and C18 synthetic internal olefins (made by double bond isomerization of alpha olefins), as well as a brine and additives such as barite. Examples 1 and 2 of Gee shows that the C14, C16 and C18 alpha olefins being double bond isomerized by the methods disclosed by Gee do not completely isomerize leaving some alpha olefins in the mixture; drilling fluids similar to that of Example 7 were made in Examples 5 and 6 using the product of Example 2. The fluids of Gee were shown to have minimal toxicity in Example 10, and they are inherently biodegradable given that they are of the sort covered by the scope of the rejected claims.

As to claims 2-3, see Example 1 of Gee especially, and note the issue of overlap discussed above.

As to claim 4 and 16, Gee teaches that up to 20 percent alpha olefin may be present and the fluid may be derived from a single olefin (see column 3, lines 25-35). Example 4 shows a C16 only derived fluid.

As to claims 13-14, Gee teaches that the fluids may be made by blending individual, commercially available components (both internal and alpha olefins) (see column 2, lines 55-60).

As to claims 15-18, the drilling related steps are all implied in the teachings that the fluids of Gee are useful as drilling fluids, and additionally as to claims 17-18, no specific amount of any of the "olefins" is required, C14's to C18's may be present (see column 2, lines 55-60), and pure components (including alpha olefins) may be used in blending the fluid (see column 2, lines 55-60); C15's are specifically mentioned in

Art Unit: 1712

column 3 at lines 40-50. It is clear from these teachings and their context that Gee contemplated C17's as well as in the choice of components.

9. Claims 1, 5-8, 13, 15 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Carpenter et al. in US Patent 6,323,157. Carpenter teaches well fluid base oils comprising synthetic C14 to C18 internal olefins.

Example 3 shows a well fluid base oil (which could of course be a well/drilling fluid alone) containing about 50 wt % C14 and 50 wt % C16 and C18 internal olefins. C15 and C17 internal olefins may be included (see column 5, lines 29-40). The fluids of Carpenter are inherently biodegradable as they contain the same components as those of the rejected claims; in addition, there is disclosure as to low toxicity of Carpenter's fluids in Example 1 and a discussion indicating that non-aromatics are generally biodegradable (see column 3, lines 35-41).

Carpenter teaches basic steps involved in drilling (see column 2, lines 25-48) and that oil based fluids may contain water (usually less than 50% by volume), may exist as emulsions and can contain additives like barite (see column 2, line 59 to column 3, line 19). It is also taught that the components of the fluid may be isomerized, then blended together (see column 4, lines 30-34).

As to claim 17, no specific amount of any of the "olefins" is required; C14's to C18's may be present as indicated in the summary of teachings of Carpenter above.

Conclusion


10. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. US Patents 5,741,759; 6,057,272; 6,407,302 and 6,417,142, as well as US Patent Application Publication 2003/0224945 disclose compositions and/or methods at least similar to those of the rejected claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. R. Richard whose telephone number is 571-272-8502. The examiner can normally be reached on M-Th, 8am-6pm and alternate Fridays 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C. R. Richard


PHILIP TUCKER
PRIMARY EXAMINER
ART UNIT 1712